

COMBINED DECLARATION AND POWER OF ATTORNEY  
IN ORIGINAL APPLICATION

Attorney Docket No.  
DVT-114J

I, a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name; that

I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the invention entitled: **HIGH POWER MODULATOR** described and claimed in the specification of U.S. Serial No. 09/479,982 filed **January 10, 2000**, that I understand the content of said specification, including the claims, that I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, that I acknowledge my duty to disclose information of which I am aware which is known to be material to patentability in accordance with 37 CFR 1.56, and that I have reviewed and understand the contents of the specification, including the claims, as amended by any amendment specifically referred to in the oath or declaration, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows: **None**.

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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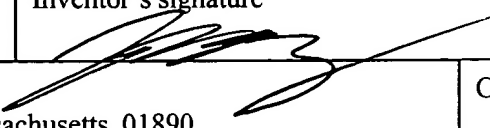
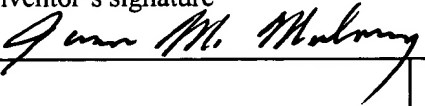
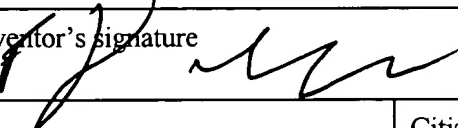
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26. The modulator of claim 19 wherein each secondary winding of the transformer controls a respective plurality of switches.
27. The modulator of claim 19 wherein at least one of the plurality of switches comprises an avalanche-rated field effect transistor.
- 5 28. The modulator of claim 19 wherein at least one of the plurality of switches comprises an insulated gate bipolar transistor.
29. The modulator of claim 19 wherein at least one of the plurality of retriggerable drive circuits comprises a Zener diode connected in series with a field effect transistor.
- 10 30. The modulator of claim 19 wherein at least one of the plurality of retriggerable drive circuits comprises a bipolar voltage limiting means.
31. <sup>(once amended)</sup> A method of switching a signal, the method comprising the steps of:
- a) applying an input signal to a primary of a transformer;
  - b) inducing a voltage in a plurality of secondary windings of the transformer in response to the input signal; ~~and~~
  - 15 c) switching, substantially simultaneously, each of a plurality of switches that are electrically controlled by a respective one of the plurality of secondary windings of the transformer, in response to the single input signal; <sup>d)</sup> ~~and~~
- 20 ~~32. The method of claim 31, further comprising the step of maintaining each of the plurality of switches in a substantially conducting state after termination of the input signal.~~
33. The method of claim 31, further comprising the step of applying a reset input signal to the single primary winding of the transformer.
34. A modulator comprising:

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